



ENVIRONMENTAL PLANNING



Laws Affecting Non-Living Resources “Environmental Compliance Issues”

Chapter 3

HO #s 6-9

Laws Affecting Non-living Resources

Objective: To introduce the student to the environmental resource laws expected to be encountered during the Civil Works Planning Process

Laws Affecting Non-Living Resources

- Major Environmental Laws Include:
 - Clean Water Act
 - Clean Air Act (CAA)
 - Coastal Zone Management Act (CZMA)
 - Wild and Scenic Rivers Act
 - Marine Protection, Research & Sanctuaries Act (MPRSA)
 - Farm Protection and Policy Act



Clean Water Act 1977, PL 95-217

“Placement of Fill in Waters of the US”

What are the “Waters of the US”?

<http://www.epa.gov/regulations/laws/cwa.html>

Clean Water Act 1977, PL 95-217

- The Clean Water Act is the principle law governing pollution control and water quality of the nation's waterways.
- The main purpose is to restore/maintain the chemical, physical and biological integrity of the nation's waters.

Clean Water Act 1977, PL 95-217

- The Act specifically defines USACE responsibilities for regulating discharge of dredged and fill material in waters of the United States including jurisdictional wetlands.
- The Corps' regulatory role differs from the civil works activities although ultimately requirements for compliance are the same.

Clean Water Act 1977, PL 95-217

- Enacted as the Federal Water Pollution Control Act. 1948, PL 80-845.
- Revised numerous times.
- Current name provided in 1977.
- 1972 Amendments, PL 92-500, added Section 404 regulating the discharge of fill into the waters of the US (Rivers and Harbors Act of 1899).

Clean Water Act 1977, PL 95-217

- Goals:
 - Eliminate pollutant discharge.
 - Make waters safe for fish, shellfish, wildlife and people.
- The Act includes numerous provisions.
- We will concentrate on Sections 102 (b), 401, 402, and most importantly Section 404.

Clean Water Act 1977, PL 95-217

- Section 102(b).
 - Requires the consideration of storage for the regulation of stream flows in reservoir planning.
- Section 401. (Water Quality Certification)
 - Federal sovereign immunity is waived.
 - State certification required for a project to be in compliance with established effluent limitations and water quality standards.

Clean Water Act 1977, PL 95-217

■ Section 402.

- Establishes discharge requirements under National Pollutant Discharge Elimination System (NPDES).
- Replaced 1899 refuse discharge authority of the Corps of Engineers.
- Construction sites over 1 acre are considered a Section 402 point source discharge (effective March 2003).

Clean Water Act 1977, PL 95-217

- Section 404.
 - Regulates the discharge of dredged or fill material into the waters of the U.S.
 - Corps' projects must comply with the 404(b)1 guidelines.
 - Significant regulatory role for the Corps of Engineers
<http://www.usace.army.mil/inet/functions/cw/cecw/o/reg/index.htm>.
 - Can be a major point of controversy between agencies-mitigation ratios.

Clean Water Act 1977, PL 95-217

□ Section 404 (cont)

□ 404 (b)(1) Guidelines.

- 40 CFR Part 230 Guidelines for the Specification of Disposal Sites for Dredged or Fill Material, FR Vol. 45, Wed Dec 24, 1980.
- Format: Exhibit C-1 page 48 Appendix C of ER 1105-2-100.

Clean Water Act 1977, PL 95-217

■ 404 (b)(1) Guidelines (cont).

- Requires **sequential** avoidance, minimization and compensation where practicable.
- The 404 (b)(1) format lays out a list of items that must be addressed in the analysis of impacts associated with the placement of the fill.
- Opportunity to incorporate with analyses required by NEPA. See 40 CFR 1502.25.

Clean Water Act 1977, PL 95-217

- 404 (b)(1) Guidelines (cont).
 - Basis for a request of 401 Water Quality Certification from the state regulatory agency.
 - Without a 404 fill activity the state has no jurisdiction to issue a 401 WQC.
 - Inclusion in an EIS going to Congress triggers 404(r) exemption.
 - Use limited in states with control of 404 process.
 - Corps' Policy is to apply for 401 Certificate.

Clean Water Act 1977, PL 95-217

- Ocean Issues:
 - Disposal will be addressed under the Marine Protection Research and Sanctuaries Act.
 - Fill is addressed under the Clean Water Act.
- Non-Point Source Pollution.
 - Program (Section 319). Corps' projects must be consistent with EPA approved¹⁵

Clean Water Act 1977, PL 95-217

Classroom Activity

- Conduct a 404(B)(1) analysis
- Handout compliance table
- Review for Field Exercise
- See Handout #s 7 & 8

Three landscape panels showing air quality degradation. The first panel shows a clear blue sky over green hills and brown ground. The second panel shows a large white cloud obscuring the sky. The third panel shows a clear blue sky over green hills and brown ground.

Clean Air Act 1970, PL 91-604

“General Conformity Rule”

The purpose of this act is to protect public health and welfare by the control of air pollution at its source.



Critical Air Pollutants

- Based on Scientific Health Effect's Criteria
 - Ozone (NO_x & VOC, which are both ozone precursors)
 - Carbon Monoxide (CO)
 - Particulate Matter (PM-10; 2.5)
 - Nitrogen Dioxide (NO₂)
 - Sulfur Dioxide (SO₂)
 - Lead (Pb)

National Ambient Air Quality Standards for Critical Pollutants

Critical Pollutant	Averaging Period	Primary Standard	Secondary Standard
Sulfur Dioxide (SO ₂)	Annual Arithmetic Mean 24-Hour Average 3-Hour Average	0.03 PPM 0.14 PPM None	None None 0.50 PPM
Particulate Matter (PM ₁₀)	24-Hour Average	150 µg/m ³	150 µg/m ³
Particulate Matter (PM _{2.5})	Annual Arithmetic Mean 24-Hour Average (2006 Std)	15 µg/m ³ 35µg/m ³	15 µg/m ³ 35 µg/m ³
Carbon Monoxide (CO)	8-Hour Average 1-Hour Average	9 PPM 35 PPM	None None
Ozone (O ₃)	8-Hour Average (1997 Std) 8-Hour Average (2008 Std) 1-Hour Average (revoked)	0.084 PPM 0.075 PPM 0.12 PPM	0.084 PPM 0.075 PPM 0.12 PPM
Nitrogen Dioxide (NO ₂)	Annual Arithmetic Mean	0.053 PPM	0.053 PPM
Lead (Pb)	3-Month Arithmetic Mean	1.5 µg/m ³	1.5 µg/m ³

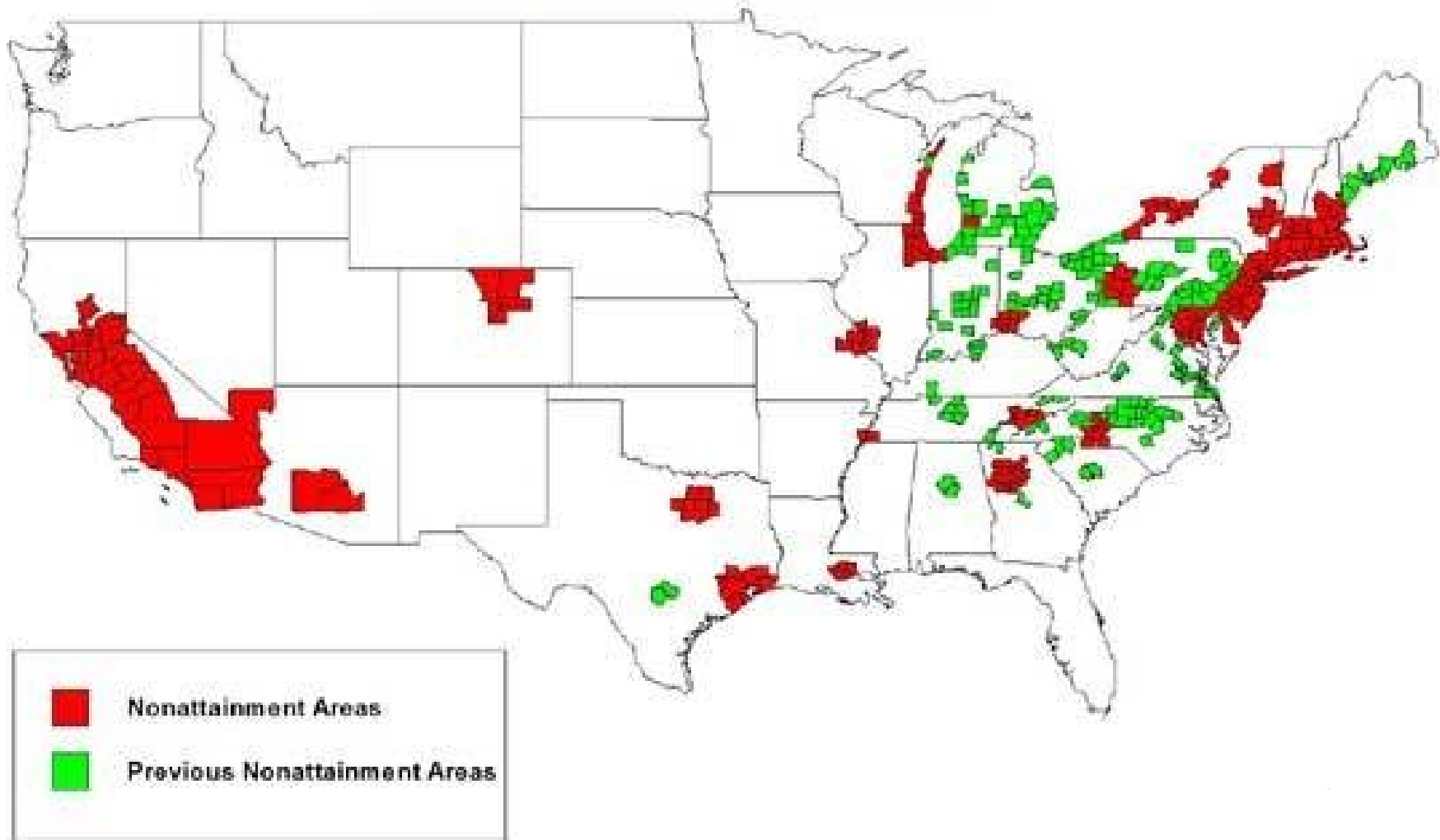
Clean Air Act 1970, PL 91-604

- ▮ Applicable in all areas
- ▮ We will emphasize those listed as “non-attainment or as maintenance” areas for National Ambient Air Quality Standards (NAAQS) requiring General Conformity.
- ▮ 40 CFR 93



Current Nonattainment and Previous Attainment Areas

8-Hour 1997 Ozone Standard

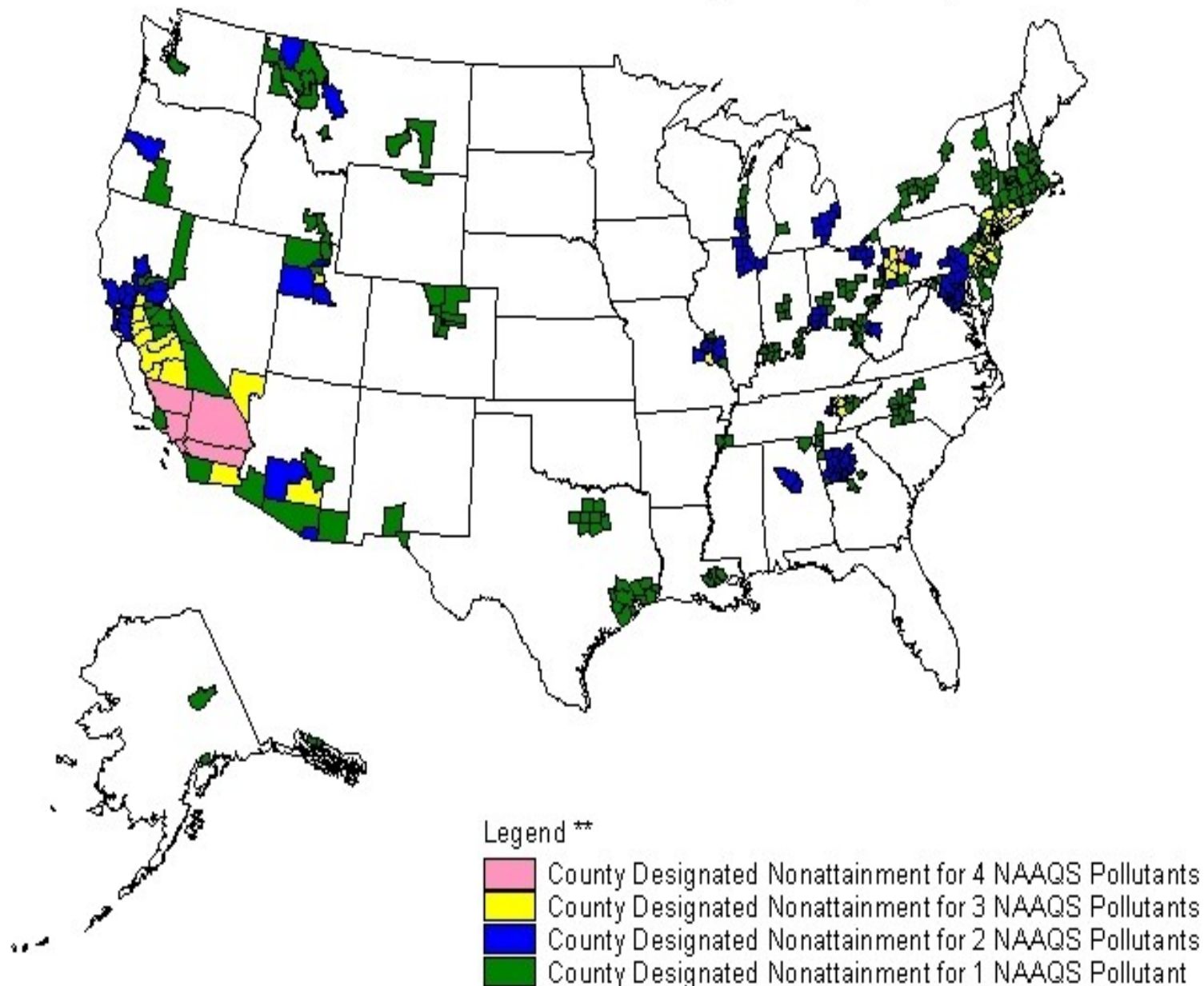


Source: U.S. EPA

A.S.L. & Associates, Helena, Montana

Counties Designated "Nonattainment"

for Clean Air Act's National Ambient Air Quality Standards (NAAQS) *



Clean Air Act 1970, PL 91-604

- Requires the States to develop Implementation Plans to obtain and maintain compliance with National Ambient Air Quality Standards (NAAQS).
 - State Implementation Plan (SIP).
 - Strategy by which the state plans to meet and maintain (NAAQS) requirements.
 - Budgets emission quotas for various sources.
 - EPA approval required.
 - Federal Agencies **Conform** to this plan

Types of Conformity

- Transportation Conformity (TC)
 - Federal Highway Administration funded projects
 - Federal Transit Act projects
 - Ferries are included in TC
- General Conformity
 - Everything else involving federal funding
- Mutually exclusive

What is General Conformity?

- It is the federal government's attempt to ensure that federal actions do not cause or contribute to a state failing to meet NAAQS.
- Requires the federal government to take a major role in meeting the clean air standards
- How does one do that?

How to Determine if Emissions are Above Threshold levels?

- Prepare an Emission Analysis (on annual basis)
 - Sum of Total Direct and Indirect Emissions for Action
 - Direct
 - Caused by the action
 - Indirect
 - Removed in time or space from action
 - Reasonably foreseeable
- Why would you want to know if you exceed threshold emission levels?

<div> <div>Determining Compliance with Federal Actions</div> <div>Criteria and Precursor Minimum Levels</div> </div>	<div> <div>Type (Nonattainment or Maintenance) and Severity of Nonattainment Area</div> <div>40 CFR Part 93.153</div> </div>	<div> <div>Tons per Year Threshold Emission Rates</div> </div>
<div> <div>Ozone (precursors VOC or NO_R)</div> <div>y</div> </div>	Serious nonattainment	50
	Severe nonattainment	25
	Extreme nonattainment	10
<div> <div>Ozone (NOR)</div> </div>	Marginal and moderate nonattainment inside an ozone transport regions	100
	Maintenance	100
<div> <div>Ozone (VOC)</div> </div>	Marginal and moderate nonattainment inside an ozone transport region	50
	Maintenance within an ozone transport region	50
	Maintenance outside an ozone transport region	100
<div> <div>Carbon monoxide (CO)</div> </div>	All nonattainment & maintenance	100
<div> <div>Sulfur dioxide (SO₂)</div> </div>	All nonattainment & maintenance	100
<div> <div>Nitrogen dioxide (NO₂)</div> </div>	All nonattainment & maintenance	100
<div> <div>Fine particulate matter (PM 2.5)</div> </div>	Serious nonattainment	70
	Moderate nonattainment and maintenance	100
<div> <div>Course particulate matter (PM₁₀) (precursors VOC, NO_R, NH₃, and SO_R)</div> </div>	All nonattainment and maintenance	100

General Conformity Requirements

- Prepare an analysis of your project's compliance with NAAQS*
- Report your findings (40 CFR 93.155)
 - Preparation a Statement of Conformity (SOC) *
 - Provide public Notice to EPA and state and local agencies.
 - Becomes part of your Feasibility Study
- Remember the SOC is not the EPA Section 309 NEPA review
 - *HO #6 (on disk)
 - *<http://www.epa.gov/air/criteria.html>

General Conformity Requirements

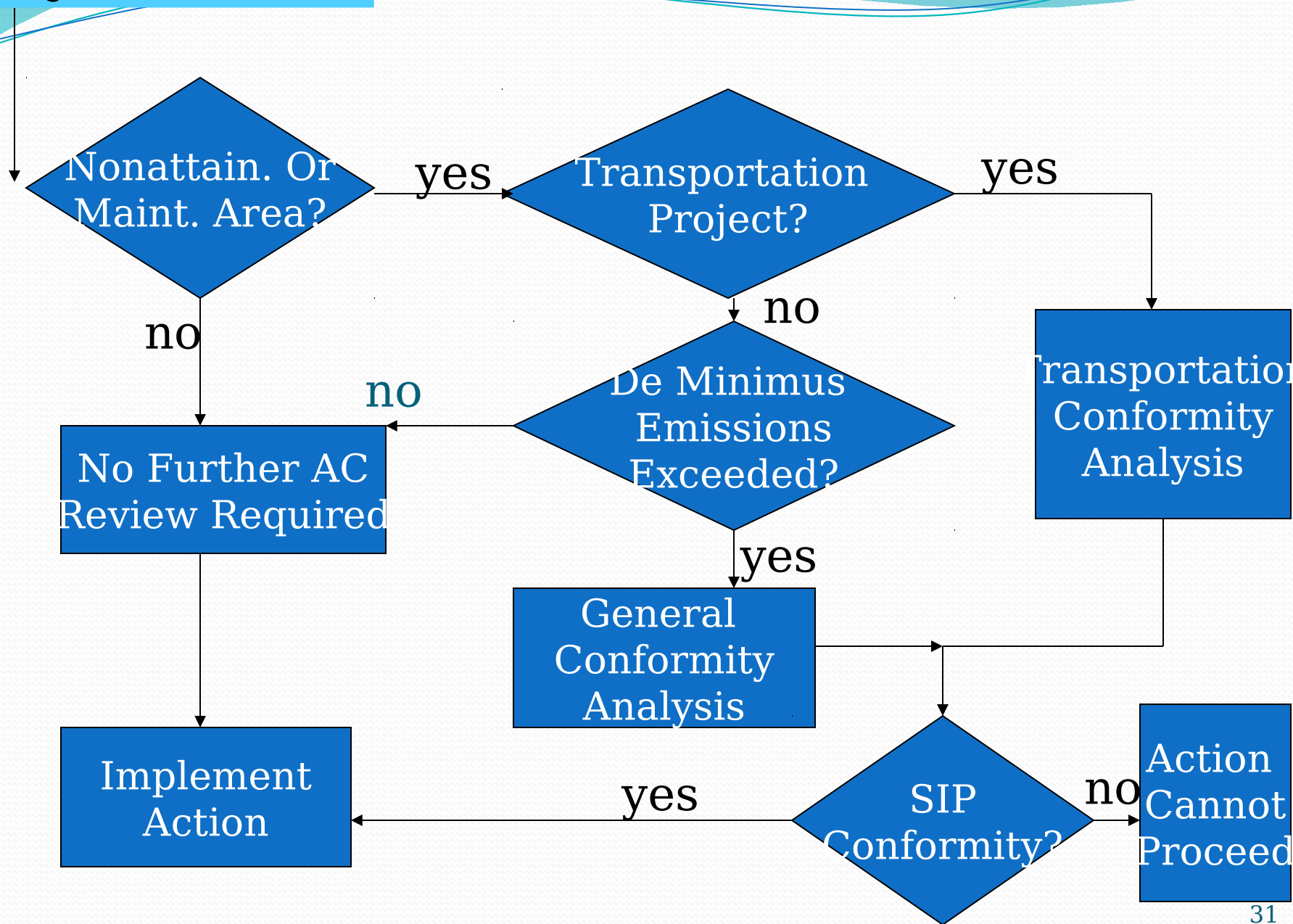
- Circulation (40 CFR 93.156).
 - Legal notice in Newspaper allowing 30 days for written comments.
 - Comments and responses must be available within 30 days of the draft conformity determination.
 - Can run concurrent with NEPA reviews.

Air Quality

- Documentation
 - Record of Non Applicability (RONA)
 - **Action generates regulated pollutants below a SIP's threshold limits.**
 - Statement of Conformity (SOC)
 - **Action generates regulated pollutants which exceed 10% of the threshold limits listed in the State's SIP.**
 - **Action exceeds SIP Threshold or De Minimis Levels described as Emission Rates**

CAA Conformity Process Flow Chart

Project location



Air Quality- Take Away Points

- Section 176(c) CAA requires Federal activity compliance with the state's SIP.
- Statement of Conformity (SOC)(40 CFR 93.158) or Record of Non Applicability (RO|NA)(40 CFR 93.153(c)).
 - Analysis of project's compliance with the SIP & NAAQS.
 - Should be incorporated into the NEPA document (40 CFR 1502.25).
- Federal Sovereign immunity is waived.





Coastal Zone Management Act 1972, PL 92-583

“Determination of
Consistency”

[http://coastalmanagement.noaa.gov/czm/czm_act.h
tml](http://coastalmanagement.noaa.gov/czm/czm_act.html)

Coastal Zone Management Act 1972 PL 92-583

- Purpose: Preserve, protect, develop, restore and enhance the resources of the nation's coastal zone for current and future generations



Coastal Zone Management Act 1972 PL 92-583

- Definitions:

Coastal Zone- coastal waters to the limits of territorial seas or international boundaries.

Coastal Waters- Great Lakes, connecting waters, and waters adjacent to shorelines; i.e. bays and estuaries.

Coastal States - includes those states

Coastal Zone Management Act 1972

PL 92-583

- NOAA authorized to provide grants to 30 states and four territories to develop management plans.
- Special Area Management Plans (SAMPs) are an opportunity for planners to collaborate with state CZM staff.
- Important Sections:
 - Section 302.
 - Declares national interest in coastal zone.
 - Delegates primary responsibility to states.

Coastal Zone Management Act 1972 PL 92-583

- Section 303.
 - ▢ Federal agencies shall cooperate with state and local governments to effect the purpose of the law.
 - ▢ Federal sovereign immunity waived.
 - ▢ Applicable out to 3 mile limit.

Coastal Zone Management Act 1972 PL 92-583

- Section 307.
 - Federal Agencies required to assure projects are consistent with the approved State Management Plans to the maximum extent practical.
 - Preparation of a Coastal Consistency Determination (CCD) by the Federal agency proposing the action.

Coastal Zone Management Act 1972 PL 92-583

CCD (continued).

- ▣ Includes an evaluation of the relevant provisions of the State's Management Plan, project description, project effects and supporting data for the conclusions of the CCD.
- ▣ Agency call on conformity.
- ▣ Should be included in NEPA document.
See 40 CFR 1502.25.

Coastal Zone Management Act 1972 PL 92-583

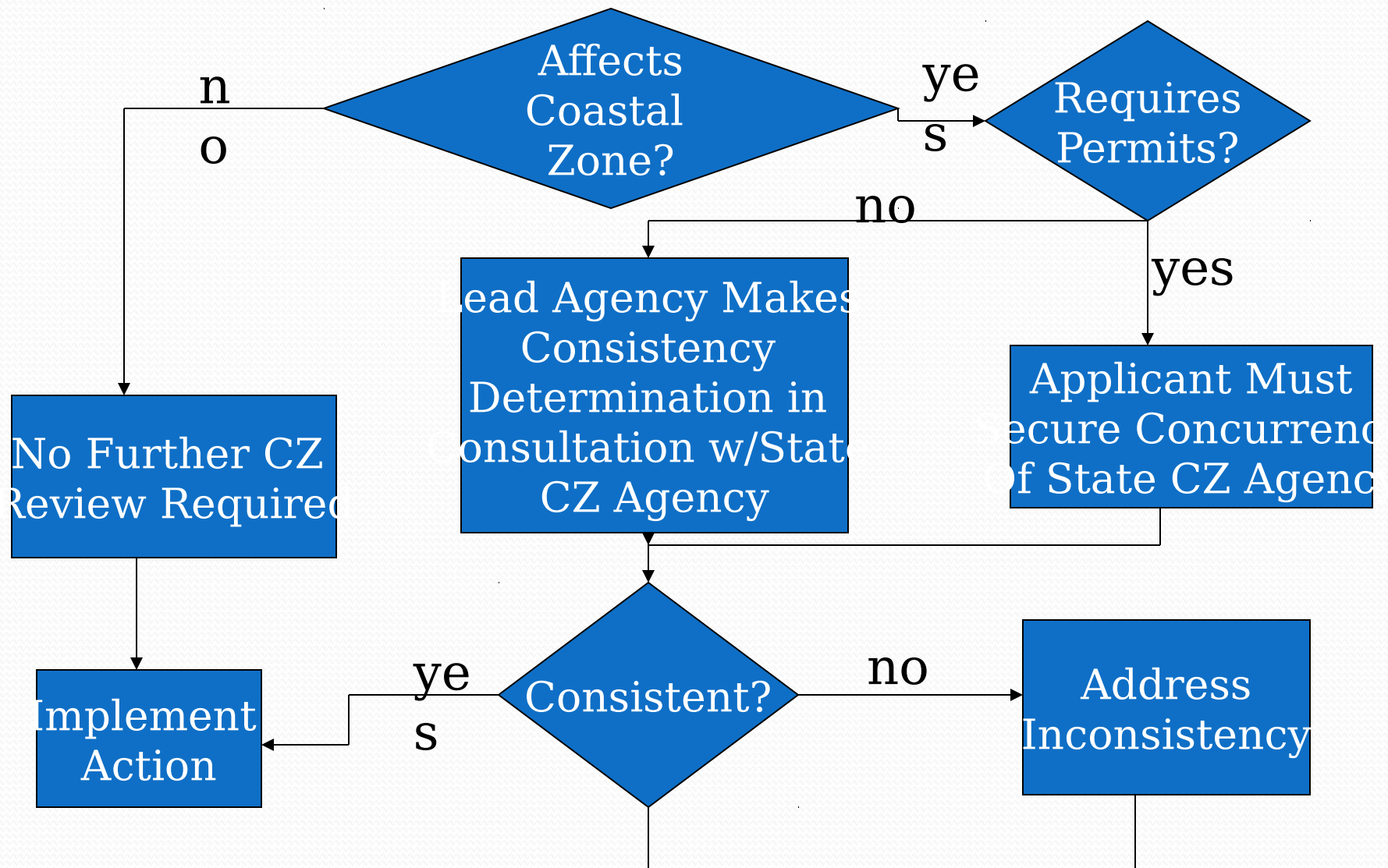
CCD (continued).

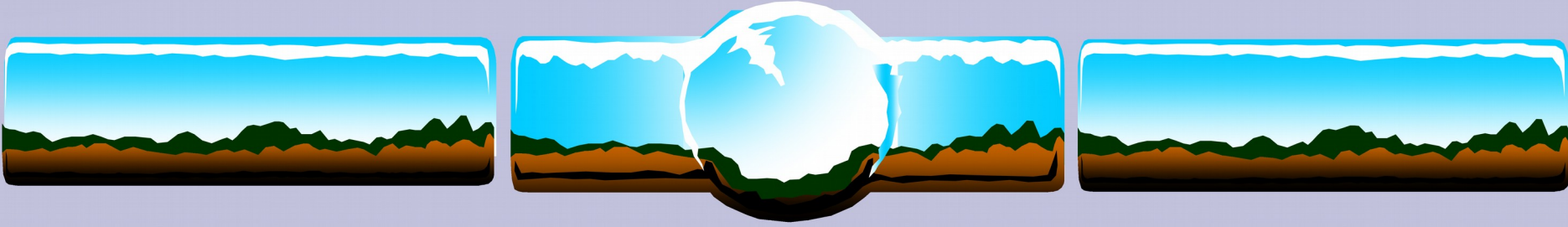
- State Response required within 45 days following receipt of CCD.
 - Extension of time-15 day maximum can be made upon request.
 - No delay of project if agency considers it to be consistent with States Coastal Management Plan.

Coastal Zone Management Act 1972 PL 92-583

- Conflict Resolution Process.
 - **Mediation** process chaired by Secretary of Commerce with cabinet level agency representation.

CZM Process Flow Chart





Wild & Scenic Rivers Act 1968 PL 90-542

“Preservation and
Protection of Rivers for
Future Generations”

[http://www.rivers.gov/wildriverslist.h
tml](http://www.rivers.gov/wildriverslist.html)

Wild & Scenic Rivers Act 1968

PL 92-542

Definitions:

- Wild Rivers--Primitive, free flowing, inaccessible except by trails.
- Scenic River Areas--Free flowing, shorelines and watershed largely primitive, accessible in places by roads.
- Recreational River Areas--Readily accessible by road or rail with some development and possible past impoundment or diversion.

Wild & Scenic Rivers Act 1968

PL 92-542

Purpose: To protect free flowing streams.

- ▢ Established the National Wild and Scenic River System.
- ▢ Currently 203 Rivers totaling 12,560 Miles in the system in 40 states .
 - ▢ 6,157 miles designated as wild.
 - ▢ 2,749 miles designated as scenic.
 - ▢ 3,654 miles designated as recreational.

Wild & Scenic Rivers Act 1968

PL 92-542

- Six agencies; COE, BLM, NPS, USFWS and USFS manage these river segments.
- Administered by National Park Service, and Forest Service.
- Corps Activities are subject to review by responsible agency.

Wild & Scenic Rivers Act 1968

PL 92-542

Review and Consultation Requirements.

- Consult list of rivers segments in project area.
- Coordinate and consult with managing agency during the scoping process.
- Determine if project would foreclose classification of the inventory segment as wild scenic

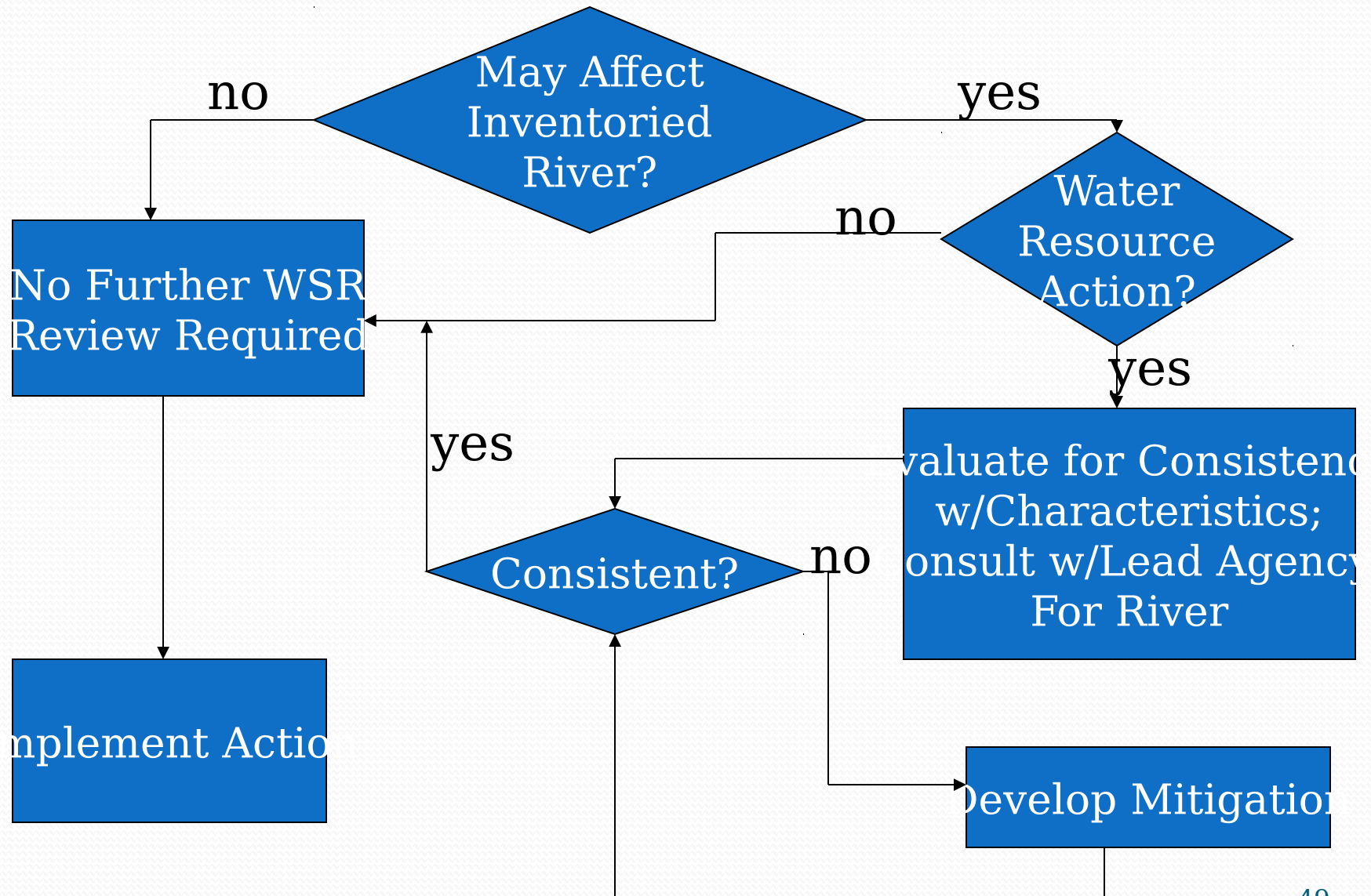
Wild & Scenic Rivers Act 1968

PL 92-542

Review Consultation Requirements (cont).

- Include analysis of impacts on ecological values of river segment in the NEPA document.
- Include appropriate mitigation consistent with agency's authorities.
- Opportunity to incorporate in analyses required by NEPA. See

Wild & Scenic Rivers Process Flow Chart



The title is displayed in large, bold, blue letters. The words "Marine Protection" are on the top line, "Research & Sanctuaries" is on the second line, and "Act 1972, PL 92-532" is on the third line. The text is centered and overlaid on a decorative banner that features a stylized landscape with green hills, a blue sky, and a white sun or moon in the center.

Marine Protection Research & Sanctuaries Act 1972, PL 92-532

“Ocean Disposal of
Dredged Material”

3 mile limit

<http://www.epa.gov/history/topics/mprsa/>

Marine Protection Research & Sanctuaries Act 1972, PL 92-532

- ▮ Purpose is to regulate ocean dumping.
- ▮ Targets degradation of the marine environment.
- ▮ Provides permit process for dredge material disposal.
- ▮ Establishes Marine Sanctuary Program to preserve and or restore ecological, recreational or aesthetic values

Marine Protection Research & Sanctuaries Act 1972, PL 92-532

Section 102.

- ▢ Charges the Administrator of EPA to:
 - ▢ Promulgate Ocean Disposal Criteria.
 - ▢ Designate Ocean Disposal Sites.
- ▢ Authorizes the SEC Army to issue permits for transportation and disposal of dredge material meeting **EPA criteria.**

Marine Protection Research & Sanctuaries Act 1972, PL 92-532

Compliance Requirements:

- Disposal must be evaluated under Section 103 of MPRSA.
- Evaluation procedures are in “Testing Manual - Evaluation of Dredged Material Proposed for Ocean Disposal” (EPA/COE-503/8-91/001).
- Regional Implementation Manuals.



Farmland Protection Policy Act 1981

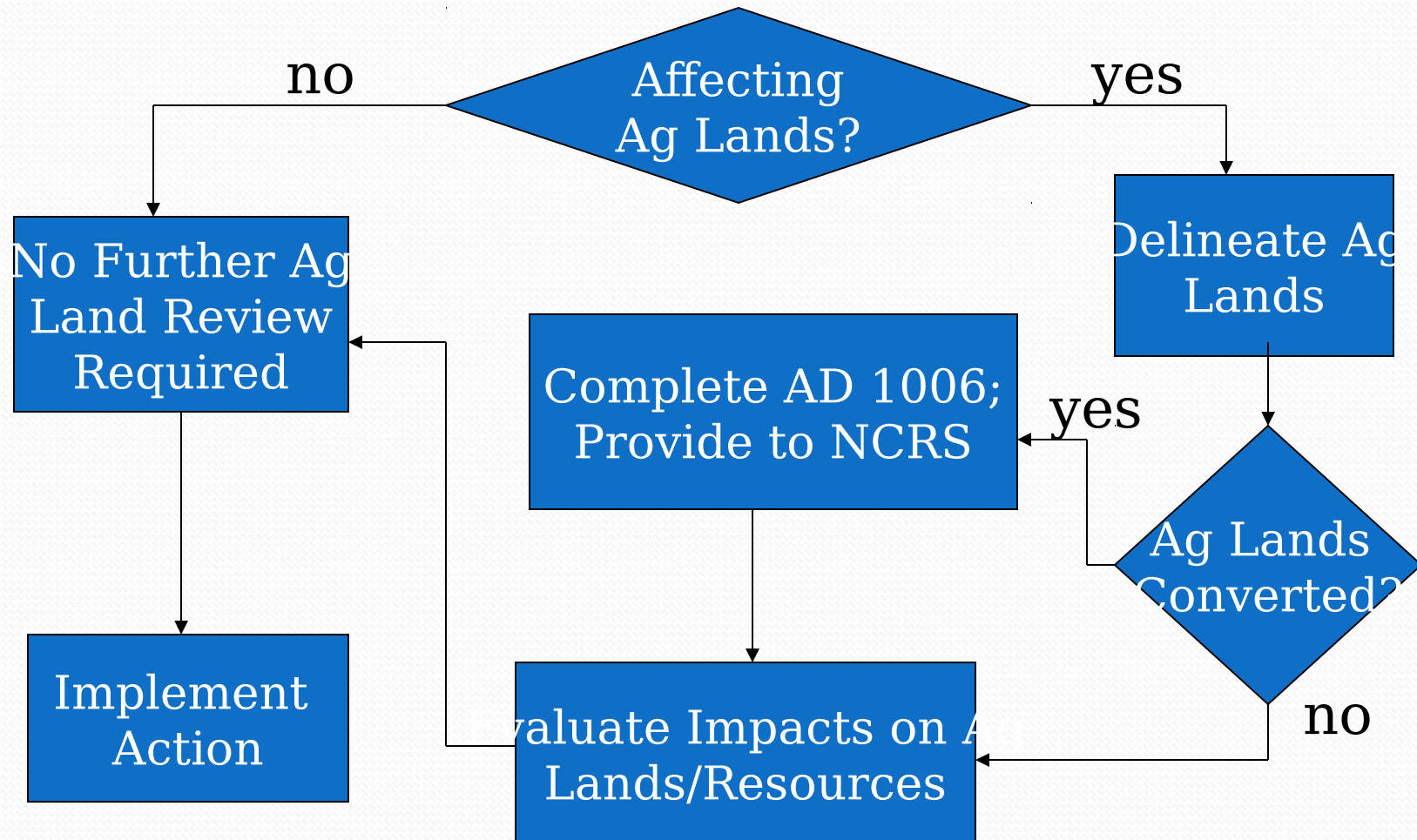
“Conversion of Farmland to
Nonagricultural Uses”

<http://www.nrcs.usda.gov/programs/fppa/>

Farmland Protection Policy Act 1981

- Purpose: To minimize farmland conversions.
- Administered by Natural Resources Conservation Service (NRCS).
- Contact NRCS for listing of prime and unique farmlands.
- Complete Farmland Conversion Impact Rating Form (Form AD 1006).
- Include analysis in NEPA document.

Prime Farmlands Process Flow Chart



Laws Affecting Non-Living Resources

Take Away Points.

- There are numerous environmental laws affecting non-living resources. We've only touched on a few of the more common ones relative to the Corps Civil Works planning process.
- CAA – “Statement of Conformity” for SIPs in “non-attainment” areas.
- CWA – “404 (b)(1) Evaluation for placement of dredged or fill material into water of the U.S.
- FPPA- Farmland Conversion Form AD 1006.

Laws Affecting Non-Living Resources

Take Away Points (cont.)

- CZMA – Prepare a Coastal Consistency Determination to assure projects consistency with the State Management Plans.
- W&SRA-Consult with managing agency.
- ***These regulations can have permitting aspects either directly or indirectly as a result of the adoption of recommendations by permitting agencies.
- See HO # 9 for Checklist